

AMENDMENTS TO THE CLAIMS

Claims 1-2 (Withdrawn)

Claims 3-5 (Canceled)

6. (Currently Amended) A ~~non-human~~ transgenic animal mouse comprising a homozygous disruption in an FPR-RS4 ~~gene~~ wherein the transgenic mouse exhibits, relative to a wild-type mouse, a phenotypic abnormality selected from the group consisting of increased anxiety, decreased coordination and decreased susceptibility to seizure.

Claim 7 (Canceled)

8. (Currently Amended) A cell derived from the transgenic mouse of claim ~~7~~6.

9. (Currently Amended) A method of producing a transgenic mouse comprising a homozygous disruption in an FPR-RS4 ~~gene~~, the method comprising:

- (a) introducing the ~~targeting construct of claim 1 into a cell~~ a construct that targets FPR-RS4 into a mouse embryonic stem cell;
- (b) introducing the embryonic stem cell into a blastocyst;
- (c) implanting the resulting blastocyst into a pseudopregnant mouse, wherein said pseudopregnant mouse gives birth to a chimeric mouse; and
- (d) breeding the chimeric mouse to produce the transgenic mouse, wherein the transgenic mouse exhibits, relative to a wild-type mouse, a phenotypic abnormality selected from the group consisting of increased anxiety, decreased coordination and decreased susceptibility to seizure.

10. (Currently Amended) A method of identifying an agent that modulates the expression or function of an FPR-RS4 ~~gene~~, the method comprising:

(a) providing a ~~non-human~~ transgenic animal mouse comprising a homozygous disruption in an FPR-RS4 ~~gene~~ wherein the transgenic mouse exhibits, relative to a wild-type mouse, a phenotypic abnormality selected from the group consisting of increased anxiety, decreased coordination and decreased susceptibility to seizure;

- (b) administering an agent to the ~~non-human transgenic animal~~ mouse; and
- (c) determining whether the expression or function of the disrupted FPR-RS4 ~~gene in the non-human transgenic animal~~ mouse is modulated.

Claims 11-13 (Withdrawn)

Claims 14-22 (Canceled)

23. (Currently Amended) A method of identifying an agent that ameliorates a phenotype associated with a homozygous disruption in ~~an~~ FPR-RS4 ~~gene~~, the method comprising:

- (a) administering an agent to a transgenic mouse comprising a homozygous disruption in ~~an~~ FPR-RS4 ~~gene~~; and
- (b) determining whether the agent ameliorates at least one of the following phenotypes: increased anxiety, impaired motor coordination or balance, ataxia, or decreased susceptibility to seizure.

Claims 24-28 (Withdrawn)

29. (Currently Amended) A method of identifying an agent that ameliorates anxiety, the method comprising:

- (a) administering an agent to the transgenic mouse of claim ~~15-6~~; and
- (b) determining whether the agent has an affect on anxiety in the transgenic mouse.

30. (Currently Amended) A method of identifying an agent that ameliorates impaired motor coordination, impaired balance, or ataxia, the method comprising:

- (a) administering an agent to the transgenic mouse of claim ~~17-6~~; and
- (b) determining whether the agent has an affect on motor coordination, balance or ataxia in the transgenic mouse.

31. (Currently Amended) A method of evaluating treatments for anxiety, the method comprising:

- (a) administering a therapeutic agent to the transgenic mouse of claim ~~15-6~~; and
- (b) determining the *in vivo* effects of the agent on anxiety level in the transgenic mouse.

32. (Currently Amended) A method of evaluating treatments for impaired motor coordination, impaired balance, or ataxia, the method comprising:
- (a) administering a therapeutic agent to the transgenic mouse of claim ~~17~~6; and
 - (b) determining the *in vivo* effects of the agent on motor coordination, balance, or ataxia in the transgenic mouse.

Claims 33-34 (Withdrawn)

35. (New) The transgenic mouse of claim 6, wherein the increased anxiety is characterized by decreased time spent in a central region during an open field test.
36. (New) The transgenic mouse of claim 6, wherein the decreased coordination is characterized by decreased time to fall during a rotarod test.
37. (New) The transgenic mouse of claim 6, wherein the decreased coordination is characterized by falling off the accelerating rotarod at a lower speed.
38. (New) The transgenic mouse of claim 6, wherein the decreased coordination comprises impaired motor coordination, impaired balance, or ataxia.
39. (New) The transgenic mouse of claim 6, wherein the decreased susceptibility to seizure is characterized by an increased dose of metrazol to reach seizure.
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